

Olivier Stietel

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Publications

- 2023 **On the Satisfiability of Local First-Order Logics with Data**, with Benedikt Bollig and Arnaud Sangnier ([url](#)).
Preprint submitted to LMCS.
- 2022 **On the Existential Fragments of Local First-Order Logics with Data**, with Benedikt Bollig and Arnaud Sangnier ([url](#)).
Submitted to GandALF. Invited for publication in LMCS special issue.
- 2021 **Local First-Order Logic with Two Data Values**, with Benedikt Bollig and Arnaud Sangnier ([url](#)).
Submitted to FSTTSC.

Presentations

- Sep. 2022 **GandALF**.
- Dec. 2021 **FSTTCS**.
- June 2020 **MOVEP**.

Education

- 2019–2023 **Ph.D. student**, *IRIF (Université de Paris) and LSV (now LMF) (ENS Paris-Saclay)*, Paris, France. Defended on 14th December 2023.
Title: “Local First Order Logic with Data: Toward Specification of Distributed Algorithms”.
Supervisors: Arnaud Sangnier and Benedikt Bollig
- 2018–2019 **M2 MPRI (Master Parisien en Recherche Informatique)**, *University Paris-Diderot*, Paris, France.
Subjects : Well Quasi Order, Graph theory, Approximation Algorithms, Algorithms and Combinatorics for Geometric Graphs, Polytopes, B-automaton and regular cost function.
- 2017–2018 **MPRI (Master Parisien en Recherche Informatique)**, *University Paris-Diderot*, Paris, France.
Subjects : Linear Logic, Category Theory, Semantics, Proof assistant, functional programming and type systems.
- 2015–2016 **Agrégation de mathématiques**, *ENS Cachan*, Cachan, France, ranked 67th out of ~300.
National high-level competitive exam for teaching. Major in Maths, minor in Computer Science.

- 2015 **Succeeded the competitive entrance exam**, *ENS Cachan*, Cachan, France.
- 2014–2015 **Master 1 in mathematics**, *Université Paris IX*, Orsay, France, with honors.
Subjects : Computer Algebra, Algebra (Galois's Theory), Probability (Markov's chains, Martingales), Logic (Set Theory and Gödel's Theorems), Algorithms for Graph, Algebraic Topology.
- 2013–2014 **Bachelor's degree in mathematics**, *Université Paris IX*, Orsay, France, with honors.
Subjects : Algorithmics, Graph theory, Probability, Calculus, ODE, Differential Geometry, Algebra, Combinatorics, Fourier Analysis, Complex Analysis.
- 2011–2013 **Classes préparatoires MPSI-MP**, *Lakanal High School*, Sceaux, France.
Two-years french intensive undergraduate studies with majors in mathematics and physics, and minors in chemistry, engineering, french and english.
- 2011 **Baccalauréat série Scientifique**, *Villarozy High School*, Guyancourt, France.
Equivalent of A-levels with majors in mathematics, physics and biology, and with several other classes.

Research Internships

- Apr-Aug 2019 **Master Internship**, *Institut de Recherche en Informatique Fondamentale (IRIF)*, Paris, France.
Regular cost function: universal algebras, categories and non-standard analysis.
Supervisors: Thomas Colcombet and Daniela Petrisan.
- Jan-Mar 2019 **Research Internship**, *Department of Computer Science*, Oxford, England.
Studies of exchangeable sequences of random variable and generalization of the DeFinetti's theorem.
Supervisor: Sam Staton.
- Oct-Dec 2018 **Research Internship**, *Department of Computer Science of ENS Ulm*, Paris, France.
Studies of probabilistic approximation algorithms on the problem of stable marriage.
Supervisor: Chien Chung Huang.
- Apr-Aug 2018 **Research Internship**, *Institut de Recherche en Informatique Fondamentale (IRIF)*, Paris.
Semantics of probabilistic PCF, probabilistic coherence spaces and KegelSpitzen.
Supervisors : Michele Pagani and Thomas Ehrhard.
- August 2017 **Research Internship**, *Laboratoire Spécification et Vérification (LSV)*, Cachan, France.
Contributed to the proof assistant Dedukti.
Supervisor: Gilles Dowek.
- July 2015 **Research Internship**, *Laboratoire de Recherche en Informatique (LRI)*, Orsay, France.
Proving a theorem of combinatorics in COQ and learning proof assistant software theory.
Supervisors: Christine Paulin and Florent Hivert.
- 2015 **Master's project**, *Université Paris IX*, Orsay, France, with honors.
Title : Connection of singularity on the torus. A problem of geometry, measure theory and arithmetics.
Supervisor: Frédéric Paulin.
- 2014 **Bachelor's project**, *Université Paris IX*, Orsay, France., with honors.
Hairy ball's theorem, a problem of differential geometry.
Supervisor: Anne Vaugon.

Teaching Experiences

- 2022–2023 **Teaching assistant**, *Université Paris Cité*, Paris, France, (192 hours).
 - Introduction to Operating Systems (1st year of Bachelor),
 - Project Management (2nd year of Bachelor),
 - Logical Tools: Propositional Calculus (2nd year of Bachelor).
- 2021–2022 **Teaching assistant**, *Université Paris Cité*, Paris, France, (64 hours).
 - Principles of Computing Systems (2nd year of Bachelor),
 - Introduction to Programming in Python (1st year of Bachelor).
- 2020–2021 **Teaching assistant**, *Université de Paris*, Paris, France, (64 hours).
 - Principles of Computing Systems (2nd year of Bachelor),
 - Introduction to Programming in C (2nd year of Bachelor).
- 2019–2020 **Teaching assistant**, *Université Paris-Diderot*, Paris, France, (64 hours).
 - Introduction to HTML, CSS, Javascript and SQL (1st year of Bachelor),
 - Project Management (2nd year of Bachelor).
- 2016 **Teaching assistant**, *MEC (Engineering school)*, Hyderabad, India, (64 hours).
 - Introduction to Programming in Python (1st year of Bachelor),
 - Probability and Statistics (3rd year of Bachelor).
- 2015–2016 **Oral Examiner**, *Classes préparatoires at Lakanal High School*, Sceaux, France, (48 hours).
 - General Mathematics (2nd year of Bachelor).

Computer Skills

OS	GNU/Linux	Editing text	Latex
Programming	Python, Sage, C, Ocaml, Java		

Languages

French	Native language.
English	Proficient speaking and writing skills.
German	Equivalent to A2 level, still in the process of learning.

Hobbys

Music	Sing in choir and play viola in orchestra.
Sports	Swimming, running, ultimate frisbee, spike ball.